

REMARKS

Claims 1 through 21 were pending in the application. By way of this amendment, non-elected method claims 19 to 21 have been cancelled.

The applicants appreciate the Examiner's consideration of the information cited by applicants in their information disclosure statements.

The abstract is objected to under various grounds. Submitted herewith is a new abstract for inclusion in the application.

Claims 1 to 18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 19 of co-pending application 10/622,136. In order to expedite prosecution of this application and the '136 application, a terminal disclaimer has been submitted in the '136 application. It is thus respectfully submitted that this provisional rejection has been overcome.

Claims 1 through 18 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over U.S. Patent Numbers 6,112,598 and 6,167,763.

At the outset it is noted that the '598 and '763 documents qualify as prior art under § 102(b).

It is respectfully submitted that the present claimed invention is clearly distinguishable over the '598 and '763 inventions for at least the following reasons.

The present invention, the '598 invention, and the '763 invention are all directed to minimizing bending artifacts. However, the present invention and the inventions of the '598 and '763 patents accomplish this objective by different structures. In the embodiments of the '598 and '763 inventions, the sensor chip is basically rectangular in cross section and the structure other than the sensor chip ensures that the end of the sensor chip containing the sensor is cantilevered. For example in Figure 3 of these patents, the shape of the core wire 16 varies so that the end of sensor chip 19 containing sensor M is cantilevered.

In contrast, in the present invention, the sensor chip itself is structured such that the end of the sensor chip containing the sensor is cantilevered. For example, as shown in the enclosed markup of Figure 3a, the sensor chip itself includes a region “A” which allows sensor portion 26 to be cantilevered.

Independent claim 1 of the present application recites “wherein the sensor chip comprises a mounting base, which, at a second end of the sensor chip, extends downwards and is adapted for mounting to the core wire such that a clearance is formed between the first end portion and the core wire.” Independent claim 10 of the present application recites “wherein the sensor element has a mounting base, which, at a second end of the sensor element, extends downwards and is adapted for mounting to the core wire such that a clearance is formed between the first end portion and the core wire.”

These features are clearly not disclosed or suggested by the ‘598 and ‘763 patents. The ‘598 and ‘763 patents are directed to different ways of mounting a sensor chip/element and are completely missing the concept of modifying the sensor chip or element itself. For at least this reason, the present claims are clearly patentable over the ‘598 and ‘763 patents.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

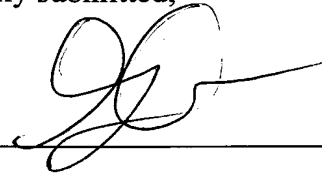
The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time

are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

By

A handwritten signature in black ink, appearing to be 'GL', written over a horizontal line.

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Abstract

A sensor and guide wire assembly (21; 31; 41) for intravascular measurements of physiological variables in a living body includes a core wire (22; 32; 42) and sensor element (23; 33; 43). The sensor element (23; 33; 43) includes basically a mounting base (24; 34; 44) and a pressure sensitive end portion (25; 35; 45) whose upper side is provided with a pressure sensitive device, such as a membrane (26; 36; 46). The mounting base (24; 34; 44) extends downwards from the end opposite to the pressure sensitive end (25; 35; 45), such that, when the sensor element (23; 33; 43) is mounted on the core wire (22; 32; 42), a clearance (27; 37; 47) is formed below the pressure sensitive end (25; 35; 45).